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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,769	12/27/2001	Shuang Liu	DM-6950	9943

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EXAMINER
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JONES, DAMERON LEVEST

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/033,769

**Applicant(s)**

LIU, SHUANG

**Examiner**

D. L. Jones

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004 and 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,15,17-22,27,29-34,39,41-46 and 66-87 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **ACKNOWLEDGMENTS**

1. The Examiner acknowledges receipt of the acceptable RCE filed 7/30/04. In addition, the Examiner acknowledges receipt of the amendment filed 5/10/04 wherein the claim status is as follows: claims 1, 4, 5, 18, 19, 30, 31, 42, 43, and 87 are amended and claims 2, 10-14, 16, 23-26, 28, 35-38, 40, 47-65, and 88-110 are canceled.

**Note:** Claims 1, 3-9, 15, 17-22, 27, 29-34, 39, 41-46, and 66-87 are pending.

## **RESPONSE TO APPLICANT'S ARGUMENTS/AMENDMENTS**

2. The Applicant's arguments filed 5/10/04 to the rejection of claims 87, 89, and 91 made by the Examiner under 35 USC 102 has been fully considered and deemed persuasive because Applicant has amended and/or canceled the appropriate claims to overcome the rejection. Therefore, the said rejection is hereby withdrawn.

**Note:** It is duly noted that Applicant has amended and/or canceled the appropriate claims to overcome the previously cited prior art. Thus, the search is once again expanded to the species wherein  $A = P$ ;  $k = 0$ ; and  $m = 3$ . The search was not further expanded because prior art was found which could be used to reject Applicant's claims.

## **NEW GROUNDS OF REJECTION (102 Rejection)**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 87 is rejected under 35 U.S.C. 102(b) as being anticipated by Mitzel et al (J. Am. Chem. Soc., 1996, 118, 12673-12682).

**Mitzel et al** disclose a compound,  $P(NH_2)_3$ , that encompasses Applicant's claims when  $A = P$ ;  $k = 0$ ; and  $m = 3$  (see entire document, especially, abstract; page 12673, column 1, second paragraph, line 6). Hence, both Applicant and Mitzel et al disclose a compound encompassed by the formula set forth in Applicant's independent claim 87.

#### ALLOWABLE CLAIMS

5. Claims 1, 3-9, 15, 17-22, 27, 39, and 66-86 are allowable over Applicant's elected species and the species represented as EXP#1 in the office action mailed 7/29/03.

**Elected species:** the chelant is tripodal; the spacer, A, is N; E1, E2, and E3 are  $(CH_2)_k-NHCOCH_2N(CH_2COOH)_2$ ; and the radionuclide is 90Y.

**EXP #1:**  $A = R_1-C, R_1-Si, R_1-Ge, N, P,$  and  $P(O)$ ;  $k = 0 - 3$ ;

$E_1, E_2,$  and  $E_3 = (CR_{17}R_{18})_k-Z-X-(CR_{19}R_{20})NR_{21}R_{22}$ ;

$Z = \text{bond}, O, NH, NR_1NR_1, ONH, N(OR_1)$ ;  $X = P(O)(OR_1)$ ;

$l = 1 - 3$ ; and  $R_1$  and  $R_{17}-R_{22}$  are as set forth in the claims.

**Note:** It should be noted that the full scope of all the pending claims has not been searched since prior art has been found to reject the claims.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. L. Jones whose telephone number is (571) 272-0617.

The examiner can normally be reached on Mon.-Fri., 6:45 a.m. - 3:15 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (571) 272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D. L. Jones  
Primary Examiner  
Art Unit 1616

September 28, 2004